EPSON®

Expression® 800

LaserSoft® SilverFast™ Lite

User's Guide

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Introduction

If you're scanning documents with OCR (optical character recognition) applications, you should use EPSON TWAIN Pro instead of SilverFast Lite for the best results. See the electronic *EPSON TWAIN Pro User's Guide* for instructions.

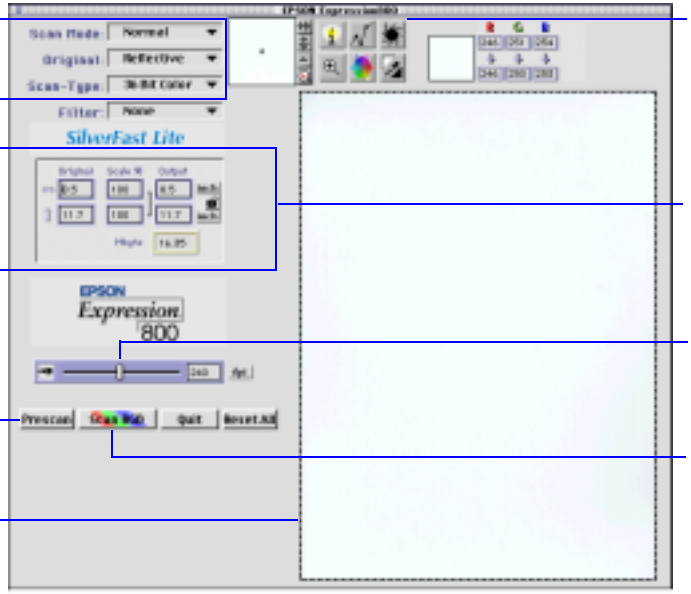
LaserSoft® SilverFast™ Lite is a TWAIN interface program between your application software and your EPSON® Expression® 800 scanner that lets you scan images into your software. It is the ideal interface for scanning photographs on any type of medium: photo paper, positive and negative transparencies, 35 mm slides and film, even Polaroid® media.

SilverFast Lite does more than transfer images from the scanner—it also lets you:

- Preview the image before scanning
- Adjust the orientation of the image (such as flip it horizontally or vertically or rotate it)
- Automatically adjust image exposure
- Make corrections to the image (such as adjusting brightness, contrast, and tone quality)
- Scan multiple frames, multiple images, and even different types of originals (color, grayscale, and black and white) at one time
- Quickly scan Polaroid photographs (for Spectra® or 600 size film) to automatically size the image and adjust the exposure
- Scan clear newsprint or magazine images with a Descreening filter to eliminate line screens

Here is a brief overview of scanning steps using SilverFast Lite:

1 Select the basic settings:
Scan Mode
Original
Scan Type



4 Use Auto Adjust to optimize image quality

5 Size or scale the image

6 Set the Resolution

2 Preview your image

7 Scan the image into your application

3 Adjust the frame border to crop the image

For Batch scanning, select **Batch Mode** or **Batch Mode Tiff** as the Scan Mode setting

For Polaroid photographs, select **Spectra Polaroid** or **600 Polaroid** as the Original setting for automatic framing and exposure

For image corrections, use the Tone Curves, Color Balance, Highlight/Shadow Control, and rotation tools.

How to Use This Guide

This Guide explains how to use the LaserSoft SilverFast Lite included on your EPSON Expression Scanning Tools CD-ROM. If you purchased the Artist or Professional model of the Expression 800, you also received a CD-ROM with LaserSoft SilverFast 4.0, the more complete version of the application. For instructions on using SilverFast 4.0, see the manual on the LaserSoft SilverFast 4.0 CD-ROM.

The information you need to use your SilverFast Lite software can be found in the following sections of this guide:

Accessing SilverFast Lite gives you an overview of the main driver window and instructions on how to access it.

Basic Scanning provides information about the basic steps needed to scan an image.

Advanced Scanning presents all the advanced scanning features of SilverFast Lite—such as sizing and batch scanning options—and tells you how to scan transparencies, Polaroid photos, and photos for enlargement.

Adjusting Image Quality describes the settings you can use to adjust your image quality, such as Auto Adjust and Color Balance.

Troubleshooting provides solutions to problems you may encounter using SilverFast Lite.

Keyboard Shortcuts lists keyboard shortcuts you can use with SilverFast Lite.

The Glossary defines terms you may not be familiar with.

The Index gives you a quick way to jump to indexed information.

Cautions, Notes, and Tips

You'll find this information throughout your guide:

Cautions must be observed to avoid damage to your equipment.

Notes contain important information about your scanner software.

Tips contain additional hints for better scanning.

Using Electronic Links

Blue underlined text indicates that the text is a link (cross-reference) to other parts of this guide. Click on the text with the mouse pointer to view the referenced information.

Accessing SilverFast Lite

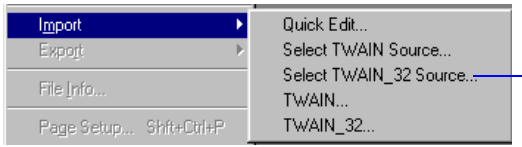
Note

Make sure you turn on your scanner before starting your application; otherwise the software may not work properly.

The steps in this section cover scanning with common TWAIN-compliant applications; other applications use different scanning steps. See your application's documentation for additional details on scanning.

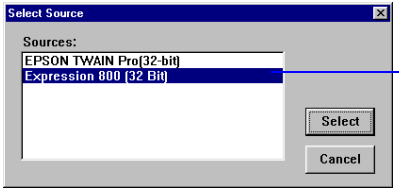
Follow the steps in this section to start SilverFast Lite from your application software. The steps may vary, depending on your application.

1. Make sure you've set up and turned on the scanner. Then place the document you want to scan on the document table. See *Setting Up and Using Your Scanner* for instructions.
2. Start your application software by selecting the program icon in its program folder.
3. Select the scanner source. Choose **Import**, **Acquire**, or **Select Source** from the File menu, and then select either **Select TWAIN_32 Source** (Windows®) or **TWAIN Select** (Macintosh®).



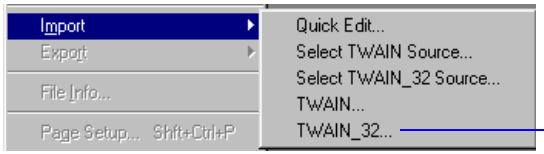
Click to select the scanner source

4. You see the Select Source dialog box. Select **Expression 800 (32 Bit)** (Windows) or **Expression800** (Macintosh) and click **Select** or **OK**.



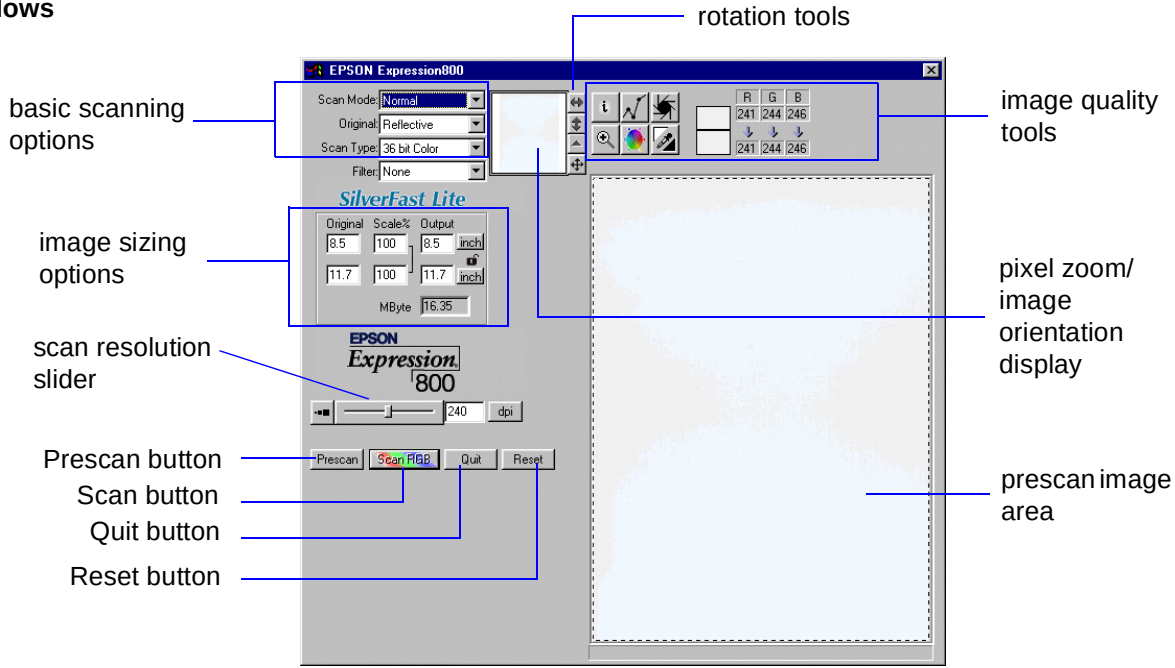
Click to select SilverFast Lite

5 To start SilverFast Lite, select **Import** or **Acquire** from the File menu; then select **TWAIN_32** (Windows) or **TWAIN Acquire** (Macintosh).

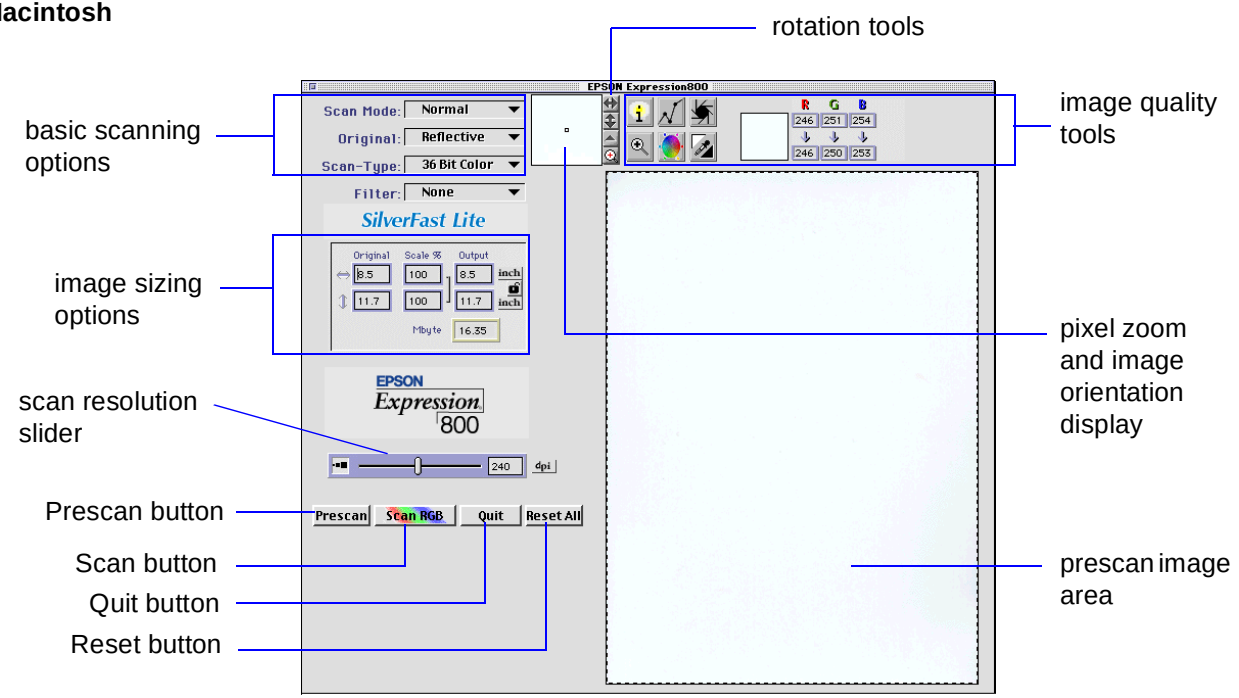


You see the SilverFast Lite window:

Windows



Macintosh



The features in the SilverFast Lite window are basically the same for both the Windows and Macintosh platforms. Any differences are noted in the text.

Keystroke commands for each platform are listed in Keyboard Shortcuts.

Basic Scanning

When you access SilverFast Lite from your TWAIN-compliant application, you can preview and manipulate image settings prior to scanning, as described in these sections:

- Basic Scanning Steps
- Changing the Basic Settings
- Framing
- Zooming
- Sizing the Image

If you're scanning using the optional transparency unit, see Scanning Transparencies for basic scanning instructions.

If you're scanning Polaroid photographs, see Scanning Polaroid Photographs for instructions on using Polaroid mode for quick scans.

The transparency unit comes with the Professional model of the Expression 800. It's available as an option for the Executive and Artist models.

Basic Scanning Steps

1. Access the SilverFast Lite window as described in Accessing SilverFast Lite.
2. Preview the image by clicking the **Prescan** button. Because the prescan image reflects what the scanned image will look like, it changes as you change certain settings.
3. Select the appropriate basic settings for the original you are scanning as described in Changing the Basic Settings.
4. Select the portion of the image to be scanned.

   To scan the entire original, click and drag the frame border (dotted line) to the edge of the prescanned image. To scan only a part of an image, click and drag the frame border to define the part of the image you want to scan. SilverFast Lite scans only the area within the frame.

   For details on framing your image, including using multiple frames, see Framing.

5. Select the output size for your scanned image as described in Sizing the Image.

Tip

Cropping an image makes the scanned file size smaller; the file is then faster to process and takes up less storage space on your hard drive.

6 If you're scanning a color photograph or a grayscale image, use the **Sharpen** filter to adjust the sharpness as necessary. If you're scanning a screened image, such as those printed in a newspaper, use the **Descreening** filter. See Applying Scanning Filters for details.

7 To automatically optimize image settings, click the Auto Adjust button. See Using Auto Adjust for details.

8 If you want to further optimize your image's colors, highlights, midtones, shadows, and other characteristics, use the image quality adjustment tools described in these sections:

- Manually Adjusting Highlights and Shadows
- Adjusting Tone Curves
- Adjusting Color Balance

9 Click the **Scan RGB** button to scan the image. You see a window showing the progress of your scan. (To cancel scanning at any time, click **Cancel**.)

10 Click **Quit** to exit SilverFast Lite. The scanned image appears in your application window.

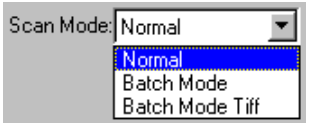
Changing the Basic Settings

Note

For a description of the Filter setting, see Applying Scanning Filters.

Prescanning lets you preview the image to see how it will look when scanned. If any adjustments are needed, change one or more of the basic settings described in these sections to obtain the results you want:

- Selecting a Scan Mode
- Choosing the Original Document Type
- Selecting the Scan Type
- Choosing the Scan Resolution

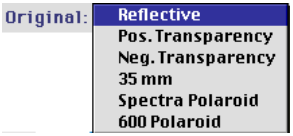


Selecting a Scan Mode

The Scan Mode indicates if you're scanning one image or frame or multiple images or frames. Select one of the following:

Normal	Scans a single image or frame into your application. This is the default mode.
Batch Mode	Scans several individual images or frames sequentially and imports them into your application.
Batch Mode Tiff	Scans several individual images or frames sequentially and saves them directly to a TIFF file on your hard disk instead of importing them into your application.

For more information on the batch modes, see Batch Scanning.



Choosing the Original Document Type

Select the type of image medium you're scanning as the Original setting. Choose one of the following:

Reflective — A reflective original (such as a printed photograph) needs to be captured by light reflecting off the original and back into the scanner. Select this option for originals you're scanning on the document table using the document cover.

Pos. Transparency — When you're scanning positive transparent originals (such as 35 mm slides) using the optional transparency unit, select this option so light can shine through the original instead of reflecting off it. See Scanning Transparencies for instructions.

Neg. Transparency — When you're scanning negative transparent originals (such as negative film strips) using the optional transparency unit, select this option so light can shine through the original instead of reflecting off it. SilverFast Lite also turns the negative image into a positive image. See Scanning Transparencies for instructions.

35 mm — Same as **Neg. Transparency**, described above.

You can't use SilverFast Lite with the optional auto document feeder; use EPSON TWAIN Pro instead. See the electronic *EPSON TWAIN Pro User's Guide* for instructions.

Spectra Polaroid or 600 Polaroid

When you're scanning Polaroid photographs, you must adjust the exposure settings differently than for conventionally developed photographs. These Polaroid modes automatically adjust exposure and size the image area. For Polaroids taken with a Spectra camera, select **Spectra Polaroid**. For pictures taken with a Polaroid 600 camera, select **600 Polaroid**. See Scanning Polaroid Photographs for details.

Selecting the Scan Type

Select color characteristics (scan type) of the original you'll be scanning. Choose one of the following:

36 bit Color	Scans using a 36-bit color space and saves a 24-bit color image (the default option)
12 bit Grayscale	Scans using a 12-bit grayscale space and saves an 8-bit black and white image with shades of gray
1 bit Line Art (OCR)	Saves the scanned object as a 1-bit black and white line art image

For information on how to scan different types of originals simultaneously, see Batch Scanning.

Note

Not all SilverFast Lite settings are available for all scan types. For example, the **Filter** setting is not available when **1 bit Line Art (OCR)** is selected.

Choosing the Scan Resolution

Resolution refers to how many dots per inch (dpi) or dots per centimeter (dpcm) you want your scanned image to contain. These sections tell you how to select the best resolution for your image:

- Factors to Consider in Selecting Resolution
- Changing the Resolution

Factors to Consider in Selecting Resolution

The best resolution for a scanned image depends on the type of image you're scanning and your final output device. The higher a resolution you select, the larger the resulting image file. For example, an 8.5 × 11-inch original scanned at 300 dpi can produce a 24MB file. The same original scanned at 72 dpi creates only a 1.3MB file. If your scanned image is intended only for on-screen viewing, you can scan at 72 dpi to reduce your file size.

Large files take longer to process and print, so consider the practical limitations of your computer system and hard disk drive when selecting a resolution. To keep your file size manageable, select the lowest possible resolution that gives acceptable quality.

As a rule of thumb for any image except line art, use a scanning resolution that is approximately one third of your output resolution. For example, use a scanning resolution up to 100 dpi with a 300 dpi laser printer, and up to 200 dpi with a 600 dpi laser printer.

For ink jet printers, such as an EPSON Stylus series printer set to 1440 dpi printing mode, use a scanning resolution of approximately 300 dpi (select approximately 240 dpi for 720 dpi printing mode).

For a list of recommended resolutions for specific image types, see *Setting Up and Using Your Scanner*.

Changing the Resolution

To change the resolution to a specific setting, move the resolution slider to the left to decrease resolution or right to increase resolution. You can also enter a resolution in the field and switch between dpi (dots per inch) and dpcm (dots per centimeter) measurement units.

If you select an appropriate resolution for your image, and then enlarge it by scaling it or selecting a larger output size, SilverFast Lite automatically increases the resolution proportionally so you don't need to adjust the resolution to retain your image quality. For example, if you're scanning a 2 × 2-inch photograph at 300 dpi and then enlarge the output size to 4 × 4-inch (a 200% enlargement), SilverFast Lite automatically scans the image at 600 dpi, even though the resolution slider is still set to 300 dpi.

If you adjust the resolution to a high setting, keep the following in mind:

- You're scanning at a resolution that gives great results for photos, and
- You're creating a very large file size using your current settings

In some instances, you may *want* to create a large file—such as when you'll be enlarging a small scanned original in your application program and want to retain a high image quality. In that case, you may want to select a resolution between 1200 and 2400 dpi so you can enlarge it later with good results.

In other instances, you may be *unaware* that your settings are too high for your image. For example, if you're enlarging an image's size in SilverFast Lite so the scanned file loads into your application already enlarged, you may not need to select as high a resolution for a successful scan. Your settings are creating a file that may be slow to process and burdensome to your system resources.

If you move the resolution slider to a very high resolution for its size, you see a message warning you that the software will be "interpolating" the resolution you selected. This means that the software must add pixels to your image to achieve the resolution you chose, but may not increase your image quality. If you see this warning message, you may want to lower the resolution setting.

If you're scanning a Polaroid photograph, you can automatically frame the image to the correct size and set custom exposure settings using Spectra Polaroid or 600 Polaroid as the original setting; see Scanning Polaroid Photographs for details.

Framing

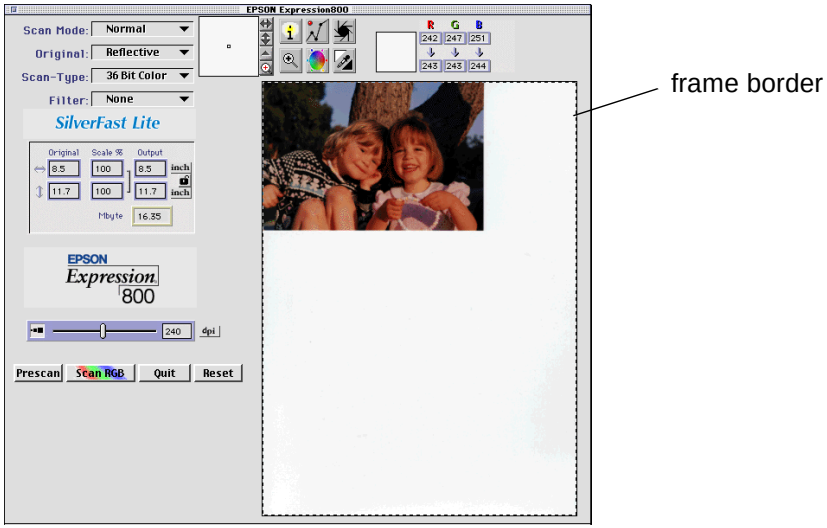
You can adjust the frame border on your image to crop out anything on the scanner's document table that you don't want to include in your scan. You can even create multiple frames on a single image, or frame several different images, and then scan them all at once.

Follow the steps in these sections to frame your images:

- Creating Frames
- Resizing and Moving Frames
- Creating Multiple Frames
- Moving Between Frames

Creating Frames

When you first prescan your document, SilverFast Lite places a default frame (the dotted line) around the border of the entire scan area. If the Original setting is set to **Reflective**, the scan area is the entire document table (8.5 × 11.7 inches). If you select **Transparency** or **Neg. Transparency**, the entire scan area is 4 × 5. If you selected **Spectra Polaroid**, the maximum scan area is 4 × 3.5 inches. If you selected **600 Polaroid**, the maximum scan area is 3.5 × 3.5 inches. (See Choosing the Original Document Type for details on these settings.)



If you want to crop and scan only one area on one image, you can adjust the default frame to the size you want. See Resizing and Moving Frames for instructions.

To create multiple frames, see Creating Multiple Frames. To move between multiple frames, see Moving Between Frames for instructions.

Resizing and Moving Frames

You can resize or move the default frame or the active frame, if you've created multiple frames.

To resize a frame, move the mouse pointer over the frame border; the pointer changes to a two- or four-headed arrow. Click and drag the frame border to the size you want.

To move a frame, move the mouse pointer anywhere within the frame; the pointer changes to a hand. Click and drag the frame to the position you want.

You can also set the frame to adjust proportionally when you've locked the output image size. See Maintaining Output Size for details.

You can't create multiple frames if the active frame is zoomed. Click the Unzoom button before creating multiple frames. If you create multiple frames and then zoom, the inactive frames disappear from the zoomed prescan image.

Creating Multiple Frames

You can create multiple frames on one image or frame several images at once. Then you can either scan the frames one at a time or batch scan them all at once. You can even select different settings for each frame, allowing you to try various settings for the same image or scan multiple images of different types, such as color photographs, grayscale images, and line art.

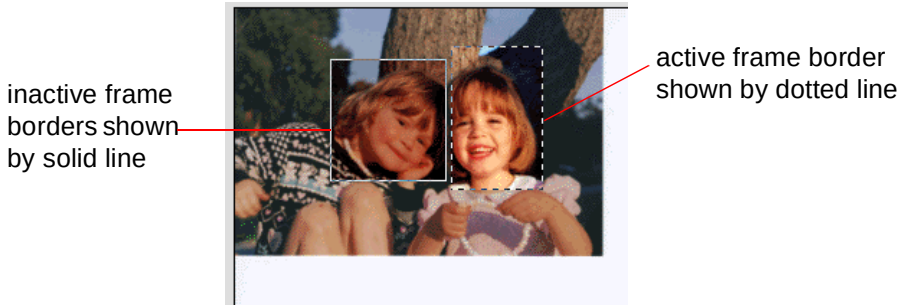
To create multiple frames, move the mouse pointer inside the prescan area anywhere outside the default frame border. (In Windows, the pointer becomes a crosshair.) Click and drag the mouse to create the new frame.

If you're creating multiple frames for batch scanning, select the settings for one frame before creating another (see Batch Scanning for details).

You can copy settings from the active frame to another frame by holding down the **Alt** key (Windows) or the **option** key (Macintosh) and clicking the target frame.

To view the frame numbers of each frame (on the Macintosh only), press the **control** key.

The new frame border is a dotted line, indicating that it is the active frame. Any other frame borders become solid lines.



To duplicate the active frame, hold down the **Alt** key (Windows) or the **option** key (Macintosh) and click in the upper left corner of where you want the new frame positioned.

The active frame is the last frame you create, unless you change it to another frame, as described in Moving Between Frames.

Moving Between Frames

Once you've created multiple frames (as described in Creating Multiple Frames), you can modify each frame as necessary for your scan. To modify a frame—such as resize it, delete it, or select settings for it—it must be the active frame (indicated by the border with the dotted line).

To select a different frame as the active frame, move the mouse pointer over the solid border of the inactive frame; the pointer becomes a white arrow. Click the border; it becomes a dotted line to indicate it is the active frame.

Note

To delete the active frame, press the **Delete** key (Windows) or the **option** and **delete** key (Macintosh; use the **remove** key on an extended keyboard). The remaining frame, or the last created frame, becomes the new active frame. (You can't delete the last remaining frame.)

Zooming only changes the way the image appears in the prescan area of the SilverFast Lite main window—it does not change the size of the scanned image.

Now you can select settings for the active frame, move to another frame, select its settings, and so on. Then you can scan your frames one at a time or batch scan them all at once.

To scan your frames one at a time, select the frame you want to scan first as the active frame; then click the **Scan RGB** button. Then select the next frame you want to scan as the active frame and repeat.

To batch scan all your frames at once, see Batch Scanning for instructions.

Zooming

SilverFast Lite lets you enlarge an image in the prescan area for easier viewing by zooming into it. You can zoom in (make the image larger) and then zoom out (make the image smaller). You can even transfer corrections made in a zoomed area to the entire image; see Transferring Zoomed Corrections for details.

To zoom in on a portion of the image, adjust the frame border around that portion and click the Zoom button. The selected area expands into the prescan area.

To zoom in further, make the frame border smaller and click the **Prescan** button.

To zoom out, click the Unzoom button (the Zoom button when it contains a "–" [minus sign]).

Transferring Zoomed Corrections

You can also make corrections in a zoomed frame and then transfer the corrections to the rest of the image.

1. Adjust the frame borders around a small area of the image that will be useful in viewing your correction effects.
2. Click the Zoom button.
3. Change the settings as necessary and view their effects in the zoomed area.
4. Drag the frame border out to include the rest of the image area you want to scan. The settings now apply to the enlarged frame.

Sizing the Image

The amount of computer memory or disk space required to store an image depends on several factors. The following sections describe these factors and explain how to resize your scanned image:

- Factors Affecting Resource Requirements
- Changing the Size of the Scanned Image

Factors Affecting Resource Requirements

These factors affect the resources required to store a scanned image:

Type of Original

The size of a scanned image depends on the type of original. Color images require up to 24 bits of computer memory or disk space for *each* pixel or dot in the image. However, grayscale images require only 8 bits per pixel, and black and white line art requires only 1 bit per pixel.

Scanning an original as a color image requires three times as much storage as scanning it as a grayscale image, and up to 24 times the storage requirement of a black and white line art image.

Size

Scanning a 2 × 2-inch original creates a smaller file than an 8 × 10-inch original.

Scaling

Scaling (enlarging or reducing) an image changes the file size accordingly. For example, scanning an image scaled to 150% of its original size requires 50% more storage than scaling it at 100%.

Resolution

Resolution is the amount of detail in an image, measured by the number of dots per inch (dpi). The higher the resolution, the larger the file size.

Tip

Scaling changes the actual output size; zooming changes only the view on your screen.

Changing the Size of the Scanned Image

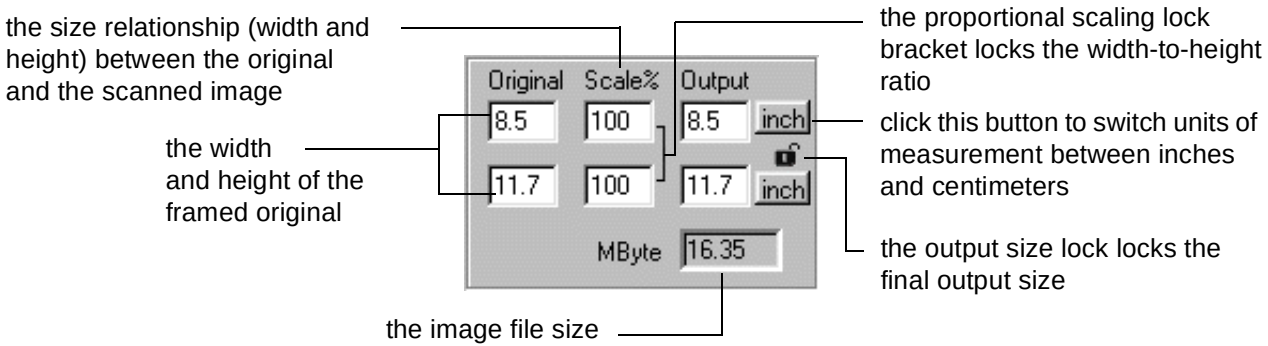
When you scan an image using the default settings, the output image is scanned at the same size and proportion as the original image. However, SilverFast Lite lets you change the size of the output image, either by changing the scale of the original or by setting the size of the final image.

The relationship between the size of the framed original, the scale, and the output size is:

Frame size × Scale = Output size

For example, a 2 × 3-inch frame with a scale of 200% makes your scanned output size 4 × 6 inches. It also increases your scan resolution by 200% to retain image quality; see Changing the Resolution for details.

The Output box displays the size of the framed original (input size), the scale percentage, and the size of the scanned image (output size):



These sections give various ways to change your image size:

- Resizing with the Mouse
- Maintaining Size Ratio (Proportional Scaling)
- Maintaining Output Size
- Resizing by Manually Entering Output Dimensions
- Resizing by Manually Entering a Scale Percentage

Resizing with the Mouse

To resize an image using the mouse:

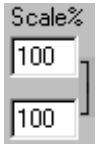
1. Click on a frame if there's more than one displayed.
2. Click and drag the corner or edge of the frame until the output size is what you want.

Proportional scaling applies to changes made to either the input frame size or the output size.

Maintaining Size Ratio (Proportional Scaling)

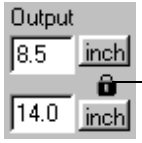
If you were to scale the width on an image differently from the height, the scanned image would look stretched or distorted. Proportional scaling keeps the proportions of an image (width and height) the same when enlarging or shrinking the image.

When you use proportional scaling and you change the width or height of an image, SilverFast Lite automatically adjusts the other dimension to maintain the same width-to-height ratio.

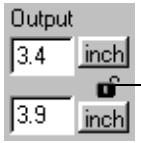


proportional scale locked

proportional scale not locked



output size locked



output size not locked

For example, if the original image frame size is 3 inches wide and 4 inches high, and you increase the output width to 4.5 inches (increase it by half), the height is automatically increased by half to 6 inches.

Proportional scaling is locked as the default setting. To unlock it, click on the proportional scaling bracket. Then type a new scale factor for the image height and/or width. The proportions of your image will not be retained.

Maintaining Output Size

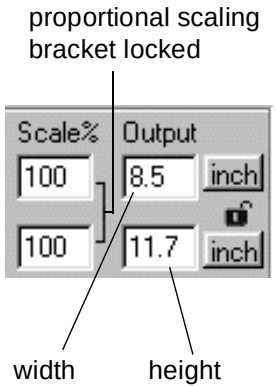
When you need to scan an image to a certain size, you can lock the output size so it stays the same as you adjust the original frame size or scale. For example, if you need to scan a photograph so it fits in a 2×3-inch space in a newsletter, enter an output size of 2×3 inches then lock the output size. SilverFast Lite automatically adjusts the scale percentage to maintain the output size as you adjust the prescan frame.

1 Enter the width and height you want for your scanned image in the Output fields as described under Resizing by Manually Entering Output Dimensions. Then click the lock icon; it changes to a closed lock.

2 To maintain the output width **and** height, move the mouse pointer to the corner of the prescan frame; the pointer changes to a 4-sided arrow.

To maintain only the width **or** the height, move the mouse pointer to one of the prescan frame's side edges (to maintain the width) or the top or bottom edge (to maintain the height); the pointer changes to a 2-sided arrow.

3 Click and drag the frame to resize the original frame area.



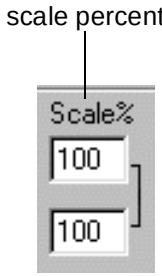
Resizing by Manually Entering Output Dimensions

To resize an image by typing in the dimensions:

1 Select the active frame you want, if there's more than one frame in your prescan image.

2 Make sure that the proportional scaling bracket is locked to automatically maintain the image's width-to-height ratio. (If it's not, click on it to lock it.) For details, see Maintaining Size Ratio (Proportional Scaling).

3 Type the new height or width measurements in one of the Output fields. The other values are adjusted as necessary to maintain your image proportions.



Resizing by Manually Entering a Scale Percentage

To resize an image by typing in a scale (magnification) percentage:

1 Click on a frame if there's more than one displayed.

2 Make sure the proportional scaling bracket is locked to automatically maintain the image's height-to-width ratio. (Just click on it to lock it.)

3 Type a new height and/or width scale factor.

A number greater than 100% increases the image output size from the original size. A number less than 100% decreases the image output size from the original size.

Advanced Scanning

SilverFast Lite provides advanced tools that let you change image orientation, scan multiple images at once, and scan transparencies, Polaroids, and photographs for enlargement.

The following topics are described in this chapter:

- Changing Image Orientation
- Batch Scanning
- Scanning Transparencies
- Scanning Polaroid Photographs

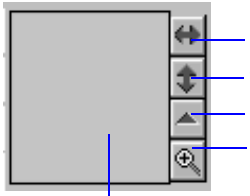
Changing Image Orientation

Note

Changes in image orientation are shown in the orientation display, not in the preview image.

If you placed an image on the scanner document table incorrectly, you can rotate the image using SilverFast Lite instead of moving the original on the scanner. You can also flip an image either horizontally or vertically.

To do this, you use the image orientation tools and the image orientation display.



flip image horizontally

flip image vertically

rotate image clockwise 90°

toggle between Pixel Zoom/Orientation view

Pixel Zoom displays a magnified (4X) view of the preview image at the position currently marked by the cursor in the preview image

Orientation view shows the orientation of the active frame

image orientation display

To change the image orientation, do the following:

- Click the toggle button to switch to Orientation view. The entire image or frame appears in the image orientation display and the toggle button changes to .
- To rotate the image, click the rotate button until the desired rotation is displayed.
- To flip the image, click the horizontal or vertical button.

Batch Scanning

Note

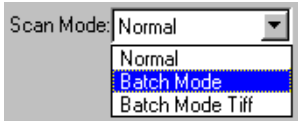
For best results, use originals that are all reflective or all transparent. Don't mix original types when batch scanning.

Batch scanning lets you automatically scan multiple originals using different customized settings for each framed image. For example, you can scan a color postcard, a black and white photograph, and a black and white line art drawing at the same time. Or you can place multiple Polaroid photographs on the document table and batch scan all of them at once (but don't select Spectra Polaroid or 600 Polaroid as the Original setting; these settings limit the prescan area to the size of one Polaroid only).

You can also batch scan multiple frames on a single original and select different settings for each frame. See Framing for instructions on creating frames.

Some applications don't support batch scanning or require you to select specific options to enable batch scanning. Check your application documentation before using this feature.

SilverFast Lite offers two batch scanning options in the Scan Mode list; see Scanning Multiple Images for instructions on using them:



Batch Mode	Imports each scanned image or frame into your application sequentially.
Batch Mode Tiff	Sequentially saves each scanned image or frame directly to your hard disk in TIFF format (Tagged Image File Format).

Scanning Multiple Images

To scan multiple images:

1. Place the original(s) to be scanned on the scanner document table.
2. Click the **Prescan** button.
3. Select one of the following from the Scan Mode list: **Batch Mode** (to import images into your application) or **Batch Mode Tiff** (to scan images into TIFF files).

   If you select **Batch Mode Tiff**, you see a prompt to enter the path and the file name to save to. The files will be sequentially numbered based on the name you enter here. Type the name and click **Save**.
4. Click and drag the mouse to create a frame around each image or portion of an image. See Framing for instructions on creating and adjusting frames. Make sure you select the settings you want to use for each frame before you create the next.
5. Click the **Scan Batch** or **Scan Tiff** button to scan all the framed images sequentially.

   If you selected **Batch Mode**, each frame is automatically scanned into your application and assigned a temporary window name (sequentially numbered). You see a Batch End message when batch scanning is finished. Click **OK**.

   If you selected **Batch Mode Tiff**, each frame is automatically scanned into a temporary file on your hard disk, numbered sequentially based on the name you entered in step 3.
6. Click the **Quit** button to exit SilverFast Lite and return to your application.

You can't switch between frames if you've zoomed in on a frame. Zoom out from the selected frame before creating or changing frames; see Framing for instructions.

To stop a batch scan in progress, click **Cancel**. When you access SilverFast Lite again, it continues batch scanning with the next frame. Click **Cancel** as necessary until all the frames in the batch scan are cancelled.

Scanning Transparencies

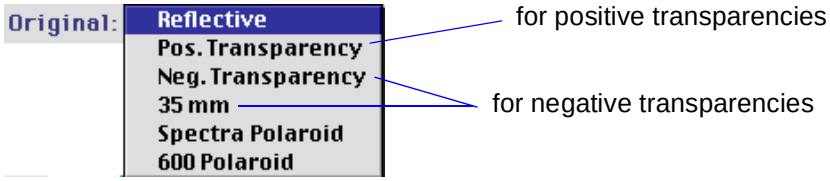
Note

The transparency unit comes with the Professional model of the scanner and is an option for the Executive and Artist models. See your electronic *EPSON Expression 800 Reference Guide* for complete information on installing and using the transparency unit.

If you're scanning positive, reflective originals (such as a printed photograph) with the optional transparency unit installed, be sure to use the reflective document mat and select Reflective as the Original setting.

If you've installed an optional transparency unit, follow these steps to scan negative or positive transparencies:

1. Place the transparency in the transparency unit. See the electronic *EPSON Expression 800 Reference Guide* for instructions.
2. Access the SilverFast Lite window as described in Accessing SilverFast Lite.
3. Return all settings to their defaults by holding down the **Shift** key and clicking the **Reset** button; the button changes to **Reset All** and resets all your settings.
4. Change the Original setting to the type of transparency you're scanning. For positive transparencies, such as slides, select **Pos. Transparency**. For negative transparencies, such as 35 mm film strips, select **Neg. Transparency** or **35 mm**.



5. Set the Scan Mode and Scan Type settings as described in Selecting a Scan Mode and Selecting the Scan Type.
6. Click the **Prescan** button. The prescan image appears in the window.
7. Frame the image as necessary; see Framing for instructions.

8 Click the Auto Adjust button to automatically adjust the exposure of the area within the frame. (See Using Auto Adjust for details.)

9 Set the output size for your scanned image as described in Sizing the Image.

10 Select a resolution setting; see Choosing the Scan Resolution for instructions. (The exact resolution you should choose depends on your image type and output device; see *Setting Up and Using Your Scanner* for resolution guidelines.)

11 If you're scanning only one frame, click the **Scan RGB** button to scan the image. You see a window showing the progress of your scan. (To cancel scanning at any time, click **Cancel**.)

If you're batch scanning multiple frames, see Batch Scanning for instructions.

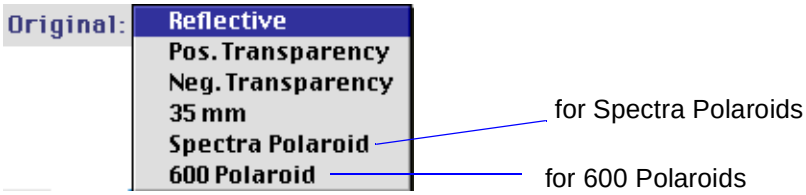
12 Click **Quit** to exit SilverFast Lite. The scanned image appears in your application window.

Scanning Polaroid Photographs

SilverFast Lite provides two options for scanning polaroids: **Spectra Polaroid** and **600 Polaroid**. Both automatically frame the photograph for the correct size (4 × 3.5-inch or 3.5 × 3.5-inch) and customize the exposure adjustments. This optimizes the image quality unique to Polaroid photographs, due to the instant development process used to create them.

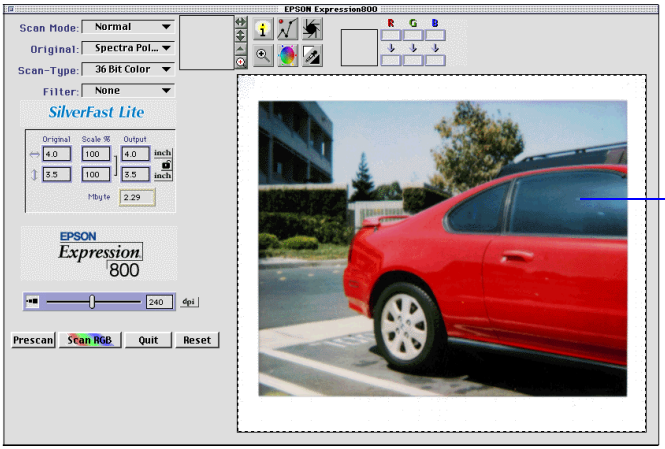
Follow these steps to scan Polaroid photographs:

1. Place the Polaroid on the scanner's document table with the upper right corner of the photo aligned with the upper right corner of the document glass.
2. Access the SilverFast Lite window as described in Accessing SilverFast Lite.
3. Return all settings to their defaults by holding down the **Shift** key and clicking the **Reset** button; the button changes to **Reset All** and resets all your settings.
4. Change the Original setting to **Spectra Polaroid** or **600 Polaroid**.



5. Set the Scan Mode and Scan Type settings as described in Selecting a Scan Mode and Selecting the Scan Type.

6 Click the **Prescan** button. The SilverFast Lite window becomes a little smaller and the prescan image appears in the 4 × 3.5-inch (or 3.5 × 3.5-inch) prescan area.



The image is automatically framed to the correct size and the Auto Adjust feature is automatically activated and optimized for Polaroid photographs. (See Using Auto Adjust for details on this feature.)

7 If you need to adjust the frame on the prescan image, see Framing for instructions.

8 Set the output size for your scanned image as described in Sizing the Image.

9 Select a resolution setting; see Choosing the Scan Resolution for instructions. (The exact resolution you should choose depends on your image type and output device; see *Setting Up and Using Your Scanner* for resolution guidelines.)

10 Click the **Scan RGB** button to scan the image. You see a window showing the progress of your scan. (To cancel scanning at any time, click **Cancel**.)

11 Click **Quit** to exit SilverFast Lite. The scanned image appears in your application window.

Adjusting Image Quality

SilverFast Lite provides advanced tools that let you modify a variety of image settings prior to scanning:

Auto Adjust	Automatically optimizes the image settings for the best contrast possible between highlights and shadows by accurately setting the white, black, middle gray, and color values. See Using Auto Adjust for details.
Highlight/ Shadow Control	Allows you to manually select the white and black values in an image and adjust the levels used to create highlights and shadows. See Manually Adjusting Highlights and Shadows for details.
Tone Curves	Changes an image's brightness, contrast, and midtones. See Adjusting Tone Curves for details.
Color Balance	Adjusts the overall color balance of a color image. See Adjusting Color Balance for details.

Other features and settings that affect image quality include:

Densitometer	Helps you make image quality adjustments by pinpointing an image area to reflect your changes and reporting color values. See Using the Densitometer for details.
Scanning filters	Allow you to precisely sharpen and descreen images. See Applying Scanning Filters for details.

Note

Auto Adjust affects only the part of the image inside the active frame. To transfer the adjustments to a larger image area, see Transferring Zoomed Corrections.

If you're using one of the Polaroid modes, SilverFast Lite automatically activates a custom Auto Adjust mode for the Polaroid photograph; see Scanning Polaroid Photographs for details.

Using Auto Adjust

The Auto Adjust tool checks the image for the brightest and darkest points and sets the highlight and shadow points according to a preset formula. It also adjusts the midtones to align with the extreme points for an overall brighter image. Use Auto Adjust for color or grayscale images; it isn't needed for line art (1-bit Line Art [OCR]).

You can also use Auto Adjust to mark particular color casts in the image for removal or preservation from automatic adjustments. See Removing or Preserving a Color Cast for details.

Activating and Resetting Auto Adjust Settings

To activate Auto Adjust, click the Auto Adjust button.

To reset the Auto Adjust settings to their default values, hold down the **Alt** key (Windows) or **option** key (Macintosh) and click the Auto Adjust button. On the Macintosh, if you have multiple frames, the frame numbers appear in each frame when you press the **control** key.

Removing or Preserving a Color Cast

Sometimes an image has a distinctive overall color, or *color cast*. Auto Adjust looks for and balances the color by removing any dominating color casts in the image. Usually you'll want to remove dominating color casts from your scanned images, but sometimes a color cast may be desirable. For example, a photograph of a sunset might have red color cast. In this case, you probably would not want to remove the color cast.

To remove any dominating color casts while automatically optimizing your image, click the Auto Adjust button.

To activate Auto Adjust *without* correcting an image's color cast, hold down the **Shift** key and click the Auto Adjust button.

Using the Densitometer

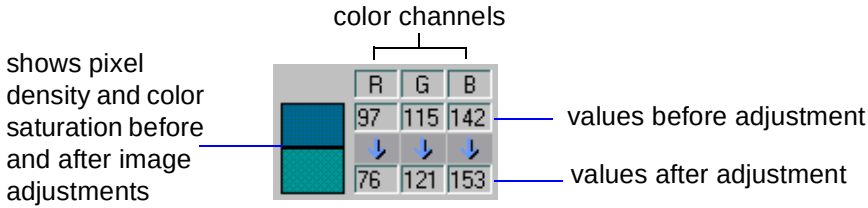
The densitometer reports the density of the colors in an image—how many pixels of each color are in a given sample area. Densitometer readings are useful when you adjust contrast, change the tone curve, and balance the color.

You can also mark a specific measuring point for the densitometer; for details, see Setting the Densitometer Measuring Point.

The top row of the densitometer shows the color values of the image at the exact spot where you've positioned the mouse pointer in the prescan image. As you move the mouse pointer to different positions, you'll see the values change. The values in the lower row show the values that result from any changes you make.

Note

The densitometer is informational only. You cannot change values from the densitometer.



Note

Before setting the densitometer measuring point, make sure you're in pixel view (the button appears in the rotation tools bar). If you not in pixel view, click the button.

Setting the Densitometer Measuring Point

You can fix the densitometer measurement point to a specific location on an image to get its color values and accurately adjust the tone curve based on those values.

1. Move the mouse pointer to the point on the image you want to mark for measurement.
2. Hold down the **Shift** key and click the image. A red cross appears at that point on the image and remains there until you press the **Shift** key while clicking the image again.
3. Now open the Gradation Curves dialog box (see Adjusting Tone Curves for details). The red, green, and blue curve anchors indicate the settings for those colors at the densitometer measuring point. Enter new values for the colors you want to adjust based on the current densitometer values.

Manually Adjusting Highlights and Shadows

The Auto Adjust feature automatically adjusts the highlights and shadows of the selected image. However, if you want you can manually adjust them. You can even have SilverFast Lite show you the brightest and darkest points in the image so you know where to select them. See Displaying the Brightest and Darkest Image Points for details.

To manually adjust highlights and shadows, follow these steps:

1. Click the Highlight/Shadow Control button, then move the mouse pointer onto your prescan image; the pointer changes to a white triangle (for highlights).
2. To adjust the highlights, click the lightest area of the image. (See Displaying the Brightest and Darkest Image Points to find the lightest area.) SilverFast Lite adjusts the image highlights by making your selection white and correcting darker tones accordingly.
3. To adjust the shadows, click the Highlight/Shadow Control button, then move the mouse pointer onto your prescan image and press and hold down the **Alt** key (Windows) or **option** key (Macintosh). The pointer changes to a black triangle (for shadows).

   Click the darkest area of the image. (See Displaying the Brightest and Darkest Image Points to find the darkest area.) SilverFast Lite makes your selection black and adjusts all lighter tones accordingly.

If you need to reset the highlight and shadow adjustments to their default settings, hold down the **Alt** key (Windows) or the **command** and **option** keys (Macintosh) and click the Highlight/Shadow Control button to reset them.

You can compare the original highlight and shadow values with the new values by viewing the densitometer. See Using the Densitometer for details.

To preserve color casts as you adjust the highlights and shadows, press the **Shift** key while you make adjustments.

Displaying the Brightest and Darkest Image Points

Locating the brightest and darkest points in your prescan image helps you adjust the highlights and shadows.

1. To find the brightest point, click the Highlight/Shadow Control button and move the mouse pointer over the prescan image; the pointer changes to a white triangle.

   Hold down the **Ctrl** and **Shift** keys (Windows) or **command** and **shift** keys (Macintosh). A circled red cross appears at the brightest image point.

2. Move the mouse pointer to the middle of the red cross and click. The highlight adjustment is made based on the values at that point.

3. To find the darkest point, click the Highlight/Shadow Control button, move the mouse pointer over the prescan image, and press the **Alt** key (Windows) or **option** key (Macintosh). The pointer changes to a black triangle.

   Release the **Alt** key, then hold down the **Ctrl** key (Windows) or **command** and **control** keys (Macintosh). A circled red cross appears at the darkest image point.

4. Move the mouse pointer to the middle of the red cross and click. The shadow adjustment is made based on the values at that point.

Adjusting Tone Curves

When an image needs adjustment, it's usually because it is too dark or too light. However, sometimes only parts of an image need adjustment. In such cases, you can use a tone curve to adjust only those tones that are too dark or too light. You can adjust the tones in the middle range (midtones) as well as the highlights and shadows by changing the shape of the tone curve.

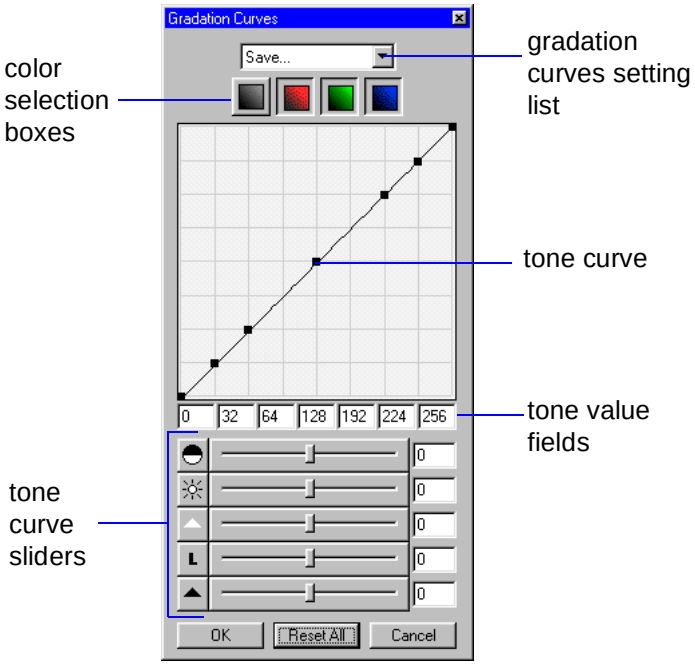
For example, you may have a group photo where everyone is well-lit except one person in the foreground who was too close to the flash and looks washed out. Since the other subjects in the photo look fine (they are in the midtone ranges), you can adjust the washed-out area (the highlight range) by decreasing the highlight value of the image. Or suppose you have a photo where some objects are too dark and others are too light (such as an outdoor photo on a bright, sunny day). Darkening the highlights and lightening the shadows can balance the tones.

There are several tools you can use to adjust the tone curves. It may take some practice to find the best ways of using these tools for optimum results. See these sections for details:

- Using the Tone Curve
- Adjusting Tone Curves of Individual Colors
- Using the Tone Curve Sliders
- Saving and Loading Tone Curve Settings

Using the Tone Curve

To display an image's tone curves, click the Tone Curve button. The Gradation Curves dialog box appears.



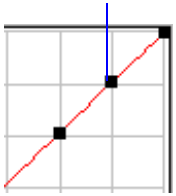
To set tone curve adjustments so they affect particular colors, see Adjusting Tone Curves of Individual Colors.

Tip

To easily determine the color values in a specific area in your image and identify their location in the tone curve, first set a densitometer measuring point (see Setting the Densitometer Measuring Point for instructions). Then open the Gradation Curves dialog box. Colored markers in the tone curve identify the position of the color values at the densitometer measuring point.

There are several ways to change the shape of a tone curve:

curve anchor



Click & drag — As you drag a curve anchor, the curve follows the movement of the anchor, but your adjustment to one anchor doesn't affect the other anchors.

To allow changes to a single anchor to affect the adjacent anchors, you can activate the adjacent anchors. Hold down the **Alt** key (Windows) or **option** key (Macintosh) and click on the adjacent anchor; the anchor turns white. Hold down the **Alt** key (Windows) or **option** key (Macintosh) and click the anchor again to deactivate it (it turns black).

Sliders — Adjust the slider controls below the curve. See Using the Tone Curve Sliders for information on adjusting the image with these sliders.

Numeric values — Type a number (+ or –) in a tone value field; each field adjusts an anchor point on the curve.

Adjusting Tone Curves of Individual Colors

All Colors button

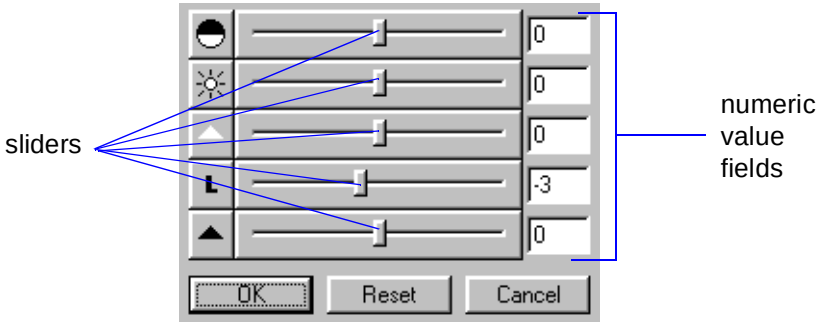
When you first access the Gradation Curves dialog box for a color image, all of the color channels are active. To modify the tone curve, either:

- Click the All Colors button to select all the RGB colors
- Click on a color button to select a specific color channel; the tone curve line changes to that color

Then make your modifications as described in Using the Tone Curve or Using the Tone Curve Sliders.

Using the Tone Curve Sliders

The sliders at the bottom of the dialog box provide an easy way to adjust the tone curve.



Each slider has a value of 0 at the middle setting. Moving to the right increases the value; moving to the left gives a negative value (–1, –2, etc.). You can also adjust the value by typing in a positive or negative number in the numeric value field next to each slider.

Adjust one or more of the following sliders:

Contrast — Controls the highlights and shadows of the tone curve without affecting the midtones.

Brightness — Adjusts the overall lightness or darkness of the image. Move the slider bar to the right to increase brightness or to the left to decrease brightness.

Highlights — Controls only the points on the right of the tone curve. Use this slider when you want to adjust highlights without affecting the shadows.

	Midtones	Adjusts the midtone values in the middle of the curve without affecting the values of the highlights or shadows at the very ends of the curve. To select the way the midtones move, click the icon to display as follows: **N** (Linear) moves all the points in a literal relationship. **L** (Logarithmic) moves the points based on a preset mathematical formula for a more gentle and subtle curve.
	Shadows	Controls only the points on the left of the tone curve. Use this slider when you want to adjust the shadows without affecting the highlights.

Saving and Loading Tone Curve Settings

When you develop a group of settings that are especially useful for a specific type of scan, you can save them so you can apply them later to other images. You can also load Photoshop® tone curves.

Follow the steps in these sections to handle your tone curve settings:

- Saving a Setting
- Loading a Previously Saved Setting
- Deleting a Previously Saved Setting
- Loading a Photoshop Setting

Saving a Setting

1. Click the Gradation Curves settings list at the top of the dialog box.
2. Select **Save**.
3. When prompted, enter a file name for the saved settings and click **OK**.

Loading a Previously Saved Setting

1. Click the Gradation Curves settings list.
2. Click the name of the setting you want to apply to the image.

Deleting a Previously Saved Setting

- For Windows, click the Gradation Curves settings list, hold down the **Shift** key, then click the name of the setting you want to delete.
- For Macintosh, hold down the **option** key, then click the Gradation Curves settings list and click the name of the setting you want to delete.

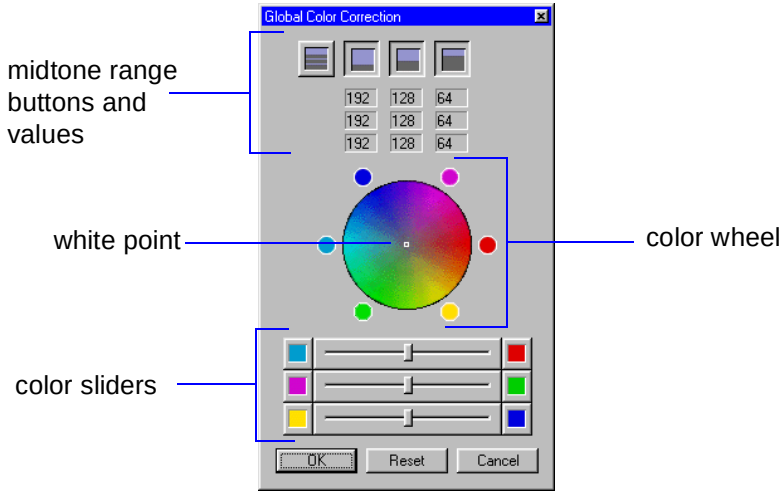
Loading a Photoshop Setting

1. Click the Gradation Curves settings list at the top of the dialog box.
2. Click **Photoshop-Import** to import a gradation curve you created in Photoshop.
3. In the Open dialog box, select the file name of the tone curve and click **Open**.

Adjusting Color Balance

The Global Color Correction tool lets you adjust the colors in an image's midtones either generally or selectively.

To access the Global Color Correction dialog box, click the Color Balance button. You see the Global Color Correction dialog box:

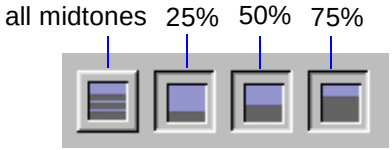


Adjust the color balance as described in these sections:

- Selecting Tone Ranges
- Modifying Color Values

Selecting Tone Ranges

Across the top of the dialog box is a series of buttons that enable you to specify the midtone range you want to edit in your image. You can select all ranges or you can choose a specific midtone range.



Modifying Color Values

The color wheel in the dialog box is composed of the three primary colors, red, green, and blue (RGB), and their complementary colors, cyan, magenta, and yellow (CMY). To adjust a color, increase or decrease the amount of its complementary color. For example, if you have an image with too much green, you can reduce the green by increasing its complementary color, magenta.

There are two ways to adjust the color values:

Color wheel	Click and drag to move the white point to a different color orientation on the wheel. The image's color balance shifts accordingly.
Color sliders	Drag the color sliders back and forth between the complementary colors.

The numeric values above the color wheel shift as you make changes. Only active color ranges are affected by your changes.

Applying Scanning Filters

SilverFast Lite can automatically adjust an image based on the type of original scanned. These automatic adjustments are called filters.

From the Filter list, choose **None** or one of the following filters:

Sharpen

Automatically sharpens an image (makes it less blurry) by increasing the contrast between adjacent pixels. Sharpen is useful primarily for photographs and grayscale images. Be sure to adjust the size of your image before using the Sharpen filter.

Descreening

Counters the effect of the screen process on your image and turns the dots into a smoother pattern. Descreening is useful for scanning photographs and illustrations printed in newspapers or magazines to improve lost resolution or sharpness.

If you use Descreening, don't enlarge the image as this could cause a moiré effect (strange patterns that appear in an image due to the spacing between the bands of dots).

Filters are only available when you select a color or grayscale scan type.

Scanning is slower when you use Descreening because of the computations required to process the image.

Troubleshooting

If you encounter any problems using SilverFast Lite, try the solutions in these sections:

- Problems Using SilverFast Lite
- Problems with Image Quality

If the information here doesn't help you solve the problem, check with your dealer or contact LaserSoft. See Where to Get Help for contact information.

Problems Using SilverFast Lite

When you select a TWAIN source, EPSON Expression 800 (32 Bit) (SilverFast Lite) isn't listed.

Problem	Solution
SilverFast Lite wasn't installed or it wasn't installed correctly	Reinstall the software following the instructions in *Setting Up and Using Your Scanner*.

SilverFast Lite doesn't start.

Problem	Solution
The scanner isn't ready	Make sure your scanner is turned on and the cables are connected properly. Also make sure you turned on your scanner before starting SilverFast Lite. If you started SilverFast Lite first, exit the program, turn off your scanner, turn it on again, and reboot your system.
Your system doesn't meet the minimum requirements	Make sure your computer, scanner, and software are compatible and meet the specifications listed in *Setting Up and Using Your Scanner*.
SilverFast Lite needs more memory	Make sure SilverFast Lite can access enough system memory. See the section on memory allocation in your computer manual.
SilverFast Lite is not selected as your TWAIN source	SilverFast Lite may not be selected as the TWAIN source in your application. See Accessing SilverFast Lite for instructions on selecting it.
Your SCSI settings are incorrect	You may have selected the wrong port number or SCSI ID during setup. Check the settings for your scanner and any other SCSI devices you may have. Then reinstall SilverFast Lite following the instructions in *Setting Up and Using Your Scanner*. Make sure you are using a unique ID address for the scanner.
A system error has occurred	An error condition may have caused your application or SilverFast Lite to stop working correctly. Save any documents in process, close any open applications, and exit your operating system. Restart Windows or your Macintosh, then start your application and try again. Sometimes an error condition causes the computer to display a message that your scanner is not recognized. If this happens, turn the scanner off and then on again; then restart your computer and try again.

Problem	Solution
Windows 95 or 98 has detected new hardware	If you are using Windows 95 or 98, its hardware detection utility may not have correctly detected the SCSI controller. Restart Windows and see the Windows Help utility for instructions on detecting new hardware.

The scanner does not start scanning.

Problem	Solution
The scanner isn't ready	Check if the scanner's operate light is on. If not, press the ⏻ operate button. Then restart your computer and try scanning again.
You have a system interrupt conflict	If you have other expansion cards in your computer, make sure they're not set to the same interrupt level or I/O address as the interface card for your scanner. See your computer manual and interface card manual.
You're scanning a large image and running out of system memory	If the image is too large or your system has a minimum amount of memory, you may run out of memory when you scan. You'll usually get an error message or your system locks up when this happens. Reduce the image size or resolution and try scanning again. If you still can't scan the image, add more system memory. For applications on a Macintosh, allocate at least 16MB as preferred memory using the Get Info dialog box in the File menu if you get memory errors. If you scanned a large image in your application and then immediately scanned another, the application may not have released the memory used for the first image. Close the application, restart it, and scan again.

You have trouble batch scanning.

Problem	Solution
Your application program doesn't support batch scanning or you don't have enough system memory	Some applications don't support batch scanning. When you try to batch scan with this type of program, you get an error message or the system locks up. Check the program documentation and, if necessary, use another program for batch scanning. You also may not have enough system memory for the batch scan. Try reducing the document size, scanning fewer pages at once, or adding more system memory.

You cannot scan images at all or only a few dots appear in the scanned image.

Problem	Solution
You may have selected incorrect scan settings	Select different SilverFast Lite settings. You may have selected an incorrect Scan Type, or the Highlight/Shadow and Tone Curves settings may be inappropriate for your image. See Changing the Basic Settings and Adjusting Image Quality for details.

Problems with Image Quality

The image is distorted or blurred.

Problem	Solution
The document isn't positioned correctly on the document table	Make sure that the document is placed flat against the document table and that no part of the original is wrinkled or warped. You may have moved the document during scanning. Check the position of the document. Make sure the scanner isn't tilted or placed on an unstable surface.

Color is patchy or distorted at the edges of the document.

Problem	Solution
The document isn't placed correctly on the document table	If the original is very thick or warped at the edges, the edges of the image may be discolored. Cover the edges of the original with opaque paper to avoid interference from outside light. If part of the original is outside the document table, the edge may be discolored. Change the position of the original.

The image is faint or out of focus.

Problem	Solution
The document isn't positioned correctly on the document table	Make sure the document is placed flat on the document table.

Problem	Solution
Some SilverFast Lite settings may be set incorrectly	Check your Tone Curves setting and/or select a darker Highlight setting. See Adjusting Image Quality for instructions.
Your monitor isn't calibrated or isn't adjusted correctly	Make sure you have calibrated your monitor to your scanner as described in *Setting Up and Using Your Scanner*. Also check your monitor's brightness and contrast settings.

The colors on the monitor seem different than the original image or printed image.

Problem	Solution
Your monitor may not be calibrated correctly	Depending on your monitor, its resolution/color settings, and your SilverFast Lite settings, the screen colors may be different from the original colors. This may be normal, especially if the colors in the printed image more closely match the original. Make sure you have correctly calibrated the screen as described in *Setting Up and Using Your Scanner*.
Some SilverFast Lite settings may be set incorrectly	Check your Scan Type and Resolution settings to make sure they are correct for the type of image you're scanning and for the output device you're using. See Changing the Basic Settings for instructions on changing these settings. If you used the Auto Adjust tool, you may have removed or retained a color cast in the image. See Using Auto Adjust for details on changing the setting.

Problem	Solution
Your system's color matching may be affecting your results.	Check the color matching and color management capabilities of your computer, display adapter, and software. Some computers can change the color palette to adjust colors on your screen. (See your software and computer manuals for details.) Exact matching of colors on your monitor, scanner, and printer is very difficult. If you have the Artist or Professional model of the EPSON Expression 800, use Monaco® Profiler Lite to set up ICC profiles for these devices. See the electronic manual on the Monaco Profiler Lite CD-ROM for details.

The printed image is larger or smaller than the size of the original.

Problem	Solution
You may have resized your output image	Check the image size settings in your application and SilverFast Lite; see Sizing the Image for details. Also, don't use the size of the image on your monitor to judge the printed size; you may have zoomed the image for easier viewing. Also some applications display high resolution images on your lower resolution monitor so they appear larger than their original size.

The printer can't print the image, or the printout is garbled or isn't an image.

Problem	Solution
Your printer and computer may not be securely connected	Check that the printer is properly connected to the computer and is correctly set up; see your printer manual.
Your software is not installed correctly for your printer	Check that your application software is properly installed and set up for your printer; see your application software manual.

Moiré (crosshatch) patterns appear in the scanned image.

Problem	Solution
You have scanned a document with halftone patterns	To minimize moiré patterns, try the following: ◗ Place a transparent sheet between the document and the document table to unfocus the image slightly. ◗ Move or angle the document slightly. ◗ Change the output image size setting slightly.

Where to Get Help

If you need technical support for using the scanner, please contact EPSON as described in *Setting Up and Using Your Scanner* or the online *Reference Guide*.

If you need help using SilverFast Lite, contact LaserSoft Imaging as follows:

Telephone: 941-383-7496

Fax: 941-387-7574

World Wide Web site: www.lasersoftInt.com

E-mail: LaserSoft@earthlink.net

Windows 95, 98, and NT Shortcuts

Tool and dialog box access

Function	Shortcut
Zoom into prescan image	**Ctrl** + **Alt** + **2**
Access Global Color Correction dialog box	**Ctrl** + **Alt** + **3**
Access Gradation Curves dialog box	**Ctrl** + **Alt** + **5**
Activate Auto Adjust feature	**Ctrl** + **Alt** + **7**
Activate Auto Adjust without correcting the color casts	**Shift** key + click the Auto Adjust button
Exit any dialog box	**Esc**

Setting and resetting controls

Function	Shortcut
Reset all settings	**Alt** + click **Reset**
Reset all settings and reset frame border	**Shift** + click **Reset**
Reset the Auto Adjust settings	**Alt** + click the Auto Adjust button
Delete custom settings from list boxes	**Shift** + click the setting

Highlight/Shadow Control commands

Function	Shortcut
Set highlight	Click the button + click in the frame
Set shadow	Click the button + **Alt** + click in the frame
Display brightest point	**Ctrl** + **Shift**
Display darkest point	**Ctrl**
Reset highlight and shadow adjustments to default settings	**Alt** +

Frame control commands

Function	Shortcut
Delete active frame (if multiple frames used)	Delete key
Duplicate active frame	**Alt** + click in the upper left corner of where you want the new frame positioned
Copy settings from the active frame	**Alt** + click the target frame

Macintosh Shortcuts

Tool and dialog box access

Function	Shortcut
Zoom into prescan image	⌘ + 2
Access Global Color Correction dialog box	⌘ + 3
Access Gradation Curves dialog box	⌘ + 5
Activate Auto Adjust feature	⌘ + 7
Activate Auto Adjust without correcting the color casts	**Shift** key + click the Auto Adjust button
Reset Auto Adjust to default setting	**option** key + click the Auto Adjust button
Exit any dialog box	Esc

Setting and resetting controls

Function	Shortcut
Start scan	**return** key
Stop prescanning or scanning	⌘ + **.** (period)
Reset all settings	click the **Reset** button
Reset all settings and reset maximum frame border	**Shift** + click the **Reset** button

Highlight/Shadow Control tools

Function	Shortcut
Set highlight	Click the button + click in the frame
Set shadow	Click the button + **Alt** + click in the frame
Display brightest point	⌘ + **shift**
Display darkest point	⌘ + **control**
Reset highlight and shadow adjustments to default settings	⌘ + **option** + click the button

Frame control commands

Function	Shortcut
Show frame numbers	**control**
Duplicate active frame	**option** + click upper left corner of where you want the new frame positioned
Delete frame (normal keyboard) Delete frame (extended keyboard)	**option** + **delete** **remove** key
Copy settings from the active frame	**Option** + click the target frame

Glossary

Brightness	The overall range, from light to dark, of an image. The brighter an image, the lighter it appears.
CMYK	Refers to **c**yan, **m**agenta, **y**ellow, and blac**k**, the basic colors used in printing to create all other colors.
Document table	The area of the scanner on which you place an item to be scanned.
dpi (dpcm)	**D**ots **p**er **i**nch (or **d**ots **p**er **c**enti**m**eter) refers to how many dots per square inch (or square centimeter) a printer can print or a monitor can display. This is the primary factor controlling resolution.
Frame	The dotted line that surrounds a selected area on the prescan area.
Grayscale	An image composed of varying shades of gray.
lpi (lpcm)	**L**ines **p**er **i**nch (or **l**ines **p**er **c**entimeter) is a measure of resolution used by service bureaus and professional printers.
Midtones	The middle range of tones in an image, lighter than the shadows and darker than the highlights.
Pixel	A small point of light (on a monitor) or ink (on a printed image) that makes up the basic unit of the image.

Prescan area The area in the SilverFast Lite main window where you can preview the item you're scanning.

Resolution The amount of detail in an image, as measured in dots per inch (dpi) or dots per centimeter (dpcm)

RGB Refers to **r**ed, **g**reen, and **b**lue, the basic colors used to create all other colors on a monitor.

Saturation The strength or intensity of a color based on the degree to which it lacks its complementary color. For example, a strongly saturated blue would have little or no yellow (its complementary color). A red with little saturation would have a lot of cyan (its complementary color) mixed in, and as a result, would look muddy or dark.

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